### (19) World Intellectual Property Organization International Bureau



## 

#### (43) International Publication Date 14 April 2005 (14.04.2005)

### **PCT**

# (10) International Publication Number WO 2005/033018 A1

(51) International Patent Classification7: A01K 63/04, C02F 3/08 C02F 3/06,

(21) International Application Number:

PCT/IS2004/000016

- (22) International Filing Date: 4 October 2004 (04.10.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

6975

3 October 2003 (03.10.2003) IS

- (71) Applicant: IDNTAEKNISTOFNUN ISLANDS [IS/IS]; Keldnaholti, IS-112 Reykjavik (IS).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): JOHANNSSON, Ragnar [IS/IS]; Alfholsvegi 16, IS-200 Kopavogur (IS). TIMMONS, James E. [US/US]; 5401 Jeffrey Street, Dickinson, Texas 77539 (US). HOLDER, John L. [CA/CA]; 606 Evergreen Avenue, Courtenay, British Columbia V9N 7N5 (CA). TIMMONS, Michael B. [US/US]; 126 Sunset Drive, Ithaca, New York 14850 (US).
- (74) Agent: A & P ARNASON; Efstaleiti 5, IS-105 Reykjavik (IS).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CII, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA. ZM, ZW
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Declaration under Rule 4.17:

of inventorship (Rule 4.17(iv)) for US only

#### Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A WATER FILTRATION SYSTEM AND ITS USE

(57) Abstract: The present invention relates to a filtration system for purifying water, in particular aquaculture water. Furthermore, the invention relates to a method of purifying water wherein water is supplied to a filtration system, comprising filtration medium for filtering water and a grid for preventing water channeling within the filter wherein said grid comprises means for allowing passage of said filtration medium through the grid, and a water recirculation system for purifying contaminated water from aquaculture and recirculating purified water to the aquaculture.